Arizona Grade 8

# LineUp With Math<sup>TM</sup> Alignment Arizona Mathematics Standard Articulated By Grade Level Grade 8

#### Strand 1: Number Sense and Operations

## **Concept 2: Numerical Operations**

Understand and apply numerical operations and their relationship to one another.

#### **Standard**

LineUp with Math<sup>™</sup> Activities

PO 9. Calculate the missing value in a percentage problem.

--Use percent relationships to resolve distance, rate, time conflicts in air traffic control.

## Concept 3: Estimation.

Use estimation strategies reasonably and fluently.

#### **Standard**

## LineUp With Math<sup>™</sup> Activities

PO 1. Solve grade-level appropriate problems using estimation.

--Predict and plot the relative motion of two or more airplanes on given paths.

--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.

## **Strand 4: Geometry and Measurement**

#### **Concept 4: Measurement - Units of Measure**

Understand and apply appropriate units of measure, measurement techniques, and formulas to determine measurements.

#### **Standard**

# LineUp With Math<sup>™</sup> Activities

PO 6. Solve problems using ratios and proportions, given the scale factor.

--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.

# Strand 5: Structure and Logic

## **Concept 1: Algorithms and Algorithmic Thinking**

Use reasoning to solve mathematical problems in contextual situations.

#### **Standard**

# LineUp With Math<sup>™</sup> Activities

PO 1. Describe how to use a proportion to solve a problem in context.

--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.